

CLAIMS

Amend claim 1 and add new claim 19 as follows:

1 **1. (Currently Amended)** A reciprocating floor conveyor comprising a plurality of
2 side by side parallel floor slats each of which includes a front end, a rear end, a top
3 section with a generally horizontal top surface, a first side, and a second side;
4 a first side wall, of each floor slat, integral with the first side of the top section,
5 extending downward from the top section and extending from the front end to the
6 rear end;
7 a second side wall, of each floor slat, integral with the second side of the top
8 section, extending downward from the top section, parallel to and spaced from the
9 first side wall;
10 a first bottom flange integral with the first side wall, of each floor slat,
11 extending laterally inward toward the second side wall, extending from the front end
12 to the rear end, and vertically spaced from the top section;
13 a second bottom flange integral with the second side wall, of each floor slat,
14 extending laterally inward toward the first side wall, extending from the front end to
15 the rear end, and vertically spaced from the top section;
16 a top section cantilevered portion integral with the top section, of each floor
17 slat, extending laterally outward from the second side wall, and extending from the
18 front end to the rear end;
19 a seal flange integral with the first side wall, of each floor slat, including a seal
20 support with a seal support surface, a vertical wall integral with the seal support

21 flange that cooperates with an outboard side of the first side wall to form a seal
22 retainer channel that is outboard of the outboard side of the first side wall, has an
23 open channel top and extends from the front end to the rear end; ~~and~~
24 wherein the top section cantilevered portion of each floor slat is vertically
25 spaced above an adjacent floor slat seal retainer channel; and
26 wherein the top section of each floor slat includes a downwardly facing bearing
27 contact surface between the first side wall and the second side wall.
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1 2. (Original) A reciprocating floor conveyor, as set forth in claim 1, wherein
2 the first side wall is vertical and the second side wall is vertical.

1 3. (Original) A reciprocating floor conveyor, as set forth in claim 1, including a
2 combination seal and bearing mounted in the seal retainer channel and having an
3 upwardly facing bearing surface engagable with a seal contact surface on an
4 adjacent floor slat cantilevered portion bottom.

1 4. (Original) A reciprocating floor conveyor, as set forth in claim 3, including
2 a projection extending downward from the seal contact surface and from the front
3 end to the rear end and wherein the projection forms a groove in the upwardly facing
4 bearing surface.

1 5. (Original) A reciprocating floor conveyor, as set forth in

2 claim 4, wherein the projection is received in the groove in the combination seal and
3 bearing to create a seal.

1 **6. (Original)** A reciprocating floor conveyor, as set forth in claim 3, wherein
2 the combination seal and bearing is an ultra-high molecular weight plastic.

1 **7. (Original)** A reciprocating floor conveyor, as set forth in claim 6,
2 including an anchor that limits movement between the combination seal and
3 bearing and the seal retainer channel.

1 **8. (Original)** A reciprocating floor conveyor, as set forth in claim 1, wherein.
2 the top section includes a first bottom surface between the first side wall and the
3 second side wall that is a central bearing sliding contact surface, a first bottom flange
4 bottom surface that is a first bearing sliding contact surface, a second bottom flange
5 bottom surface that is a second bearing sliding contact surface, and a top section
6 cantilevered portion downwardly facing surface that is a combination seal and
7 bearing sliding contact surface.

1 **9. (Original)** A reciprocating floor conveyor, as set forth in claim 1, including a
2 plurality of slide bearings each of which has a transverse channel that receives a
3 cross beam, a fore and aft channel with a base that sits on the cross beam between
4 a pair of adjacent guide beams, a right vertical wall and a left vertical wall extending
5 upward from the base, a left wing that extends laterally outward from the left vertical

6 wall and sits on a first guide beam, a right wing that extends laterally outward from
7 the right vertical wall and sits on a second guide beam, and wherein the each of the
8 plurality of side by side parallel floor slats receives the right wing of one of the
9 plurality of slide bearings and the left wing of an adjacent one of the plurality of slide
10 bearings between the first side wall and the second side wall of one of the plurality of
11 side by side parallel floor slats.

1 **10. (Original)** A reciprocating floor conveyor slide bearing comprising:

2 a horizontal central base including a base front end, a base rear end, a base
3 left side, a base right side, a cross beam engaging bottom surface, a first floor slat
4 top bearing surface, and a second floor slat top bearing surface;

5 a left side wall integral with the base left side and extending upward from the
6 horizontal base and from the base front end to the base rear end;

7 a right side wall integral with the base right side and extending upward from
8 the horizontal base and from the base front end to the base rear end;

9 a left wing integral with a left side top of the left side wall, extending to the left
10 of the left side wall, having a guide beam engaging left wing bottom surface and a left
11 wing top bearing surface;

12 a right wing integral with a right side top of the right side wall, extending to the
13 right of the right side wall, having a guide beam engaging right wing bottom surface
14 and a right wing top bearing surface;

15 a front vertical transverse wall extending downward from the horizontal central
16 base adjacent to the cross beam engaging bottom surface;

17 a rear vertical transverse wall extending downward from the horizontal central
18 base adjacent to the cross beam engaging bottom surface; and
19 wherein the front vertical transverse wall, the rear vertical transverse wall and
20 the cross beam engaging bottom surface form a transverse cross beam receiving
21 channel.

1 **11. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 10, including a left side wall upper finger that engages a first guide beam, a right side
3 wall upper finger that engages a second guide beam, and wherein the left side wall
4 upper finger and the right side wall upper finger limit upward movement of the
5 reciprocating floor conveyor slide bearing relative to the first guide beam and the
6 second guide beam.

1 **12. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 11, wherein the left side wall upper finger and the right side wall upper finger both
3 extend from the base front end to the base rear end.

1 **13. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 10, including a left side wall lower finger with a first floor slat engaging surface a right
3 side wall lower finger with a second floor slat engaging surface.

1 **14. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 13, wherein the left side wall lower finger and the right side wall lower finger limit

3 upward movement of a first floor slat and a second floor slat.

1 **15. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 13 wherein the left side wall lower finger and the right side wall lower finger both
3 extend from the base front end to the base rear end.

1 **16. (Original)** A reciprocating floor conveyor slide bearing, as set forth in
2 claim 10, including a left side wall lower front extension that extends downward
3 from the horizontal base and from the base front end to the front vertical
4 transverse wall;

5 a left side wall lower rear extension that extends downward from the
6 horizontal base and from the base rear end to the rear vertical transverse wall;

7 a right side wall lower front extension that extends downward from
8 the horizontal base and from the base front end to the front vertical transverse
9 wall; and

10 a right side wall lower rear extension that extends downward from
11 the horizontal base and from the base rear end to the rear vertical transverse
12 wall.

1 **17. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 15, wherein the reciprocating floor conveyor slide bearing is a one piece molded
3 plastic material.

1 **18. (Original)** A reciprocating floor conveyor slide bearing, as set forth in claim
2 16, wherein the reciprocating floor conveyor is molded from ultra high molecular
3 weight material.

1 **19. (New)** A reciprocating floor conveyor comprising a plurality of side by side
2 parallel floor slats each of which includes a front end, a rear end, a top section with a
3 generally horizontal top surface, a first side, and a second side;
4 a first side wall integral with the first side of the top section, extending
5 downward from the top section and extending from the front end to the rear end;
6 a second side wall integral with the second side of the top section, extending
7 downward from the top section, parallel to and spaced from the first side wall;
8 a first bottom flange integral with the first side wall, extending laterally inward
9 toward the second side wall, extending from the front end to the rear end, and
10 vertically spaced from the top section;
11 a second bottom flange integral with the second side wall, extending laterally
12 inward toward the first side wall, extending from the front end to the rear end, and
13 vertically spaced from the top section;
14 a top section cantilevered portion integral with the top section, extending
15 laterally outward from the second side wall, and extending from the front end to the
16 rear end;
17 a seal flange integral with the first side wall including a seal support with a seal
18 support surface, a vertical wall integral with the seal support flange that cooperates
19 with an outboard side of the first side wall to form a seal retainer channel that is

20 outboard of the outboard side of the first side wall, has an open channel top and
21 extends from the front end to the rear end;

22 wherein the top section cantilevered portion of each floor slat is vertically
23 spaced above an adjacent floor slat seal retainer channel; and

24 including a plurality of slide bearings each of which has a transverse channel
25 that receives a cross beam, a fore and aft channel with a base that sits on the cross
26 beam between a pair of adjacent guide beams, a right vertical wall and a left vertical
27 wall extending upward from the base, a left wing that extends laterally outward from
28 the left vertical wall and sits on a first guide beam, a right wing that extends laterally
29 outward from the right vertical wall and sits on a second guide beam, and wherein
30 each of the plurality of side by side parallel floor slats receives the right wing of one of
31 the plurality of slide bearings and the left wing of an adjacent one of the plurality of
32 slide bearings between the first side wall and the second side wall of one of the
33 plurality of side by side parallel floor slats.